

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application:

## **LISTING OF CLAIMS:**

Claims 1 to 10. (Canceled).

11. (Currently Amended) An afterburner for afterburning a residual gas from at least one of a reforming process and a fuel cell process, comprising:

at least one nozzle to meter fuel and the residual gas into a combustion chamber;

at least one device for providing an air supply;

a heat-resistant, open-pore ceramic foam for at least partially filling the combustion chamber; and

an ignition device arranged as being one of installed in and formed integrally with the ceramic foam,

wherein the ceramic foam includes silicon carbide,

wherein the ceramic foam is configured to conduct heat via a wall of the combustion chamber to the at least one of the reforming process and the fuel cell process.

12. (Previously Presented) The afterburner as recited in Claim 11, wherein: the afterburner is configured for use with a chemical reformer intended for procurement of hydrogen.

Claim 13. (Canceled).

14. (Previously Presented) The afterburner as recited in Claim 11, wherein: the ceramic foam includes open pores via reticulation.

15. (Previously Presented) The afterburner as recited in Claim 11, wherein: the ceramic foam is configured to be heated electrically.

16. (Currently Amended) The afterburner as recited in Claim 11, wherein:  
the ceramic foam is in good heat-conducting contact with at least one part of ~~[[a]]~~ the  
wall of the combustion chamber.

17. (Previously Presented) The afterburner as recited in Claim 11, further  
comprising:  
a catalytic layer for at least partially covering the ceramic foam.

18. (Previously Presented) The afterburner as recited in Claim 17, wherein:  
the catalytic layer includes platinum.

Claim 19. (Canceled).

20. (Previously Presented) The afterburner as recited in Claim 11, wherein:  
the ignition device includes one of an electric glow filament and a glow plug.

Claim 21. (Canceled).

22. (Previously Presented) The afterburner as recited in Claim 11, wherein:  
the at least one nozzle includes one of a swirl nozzle and a multi-orifice nozzle.

23. (New) The afterburner as recited in Claim 11, further comprising:  
a flame area which extends from the at least one nozzle to an outlet chamber.

24. (New) The afterburner as recited in Claim 23, wherein:  
the flame area extends in an oval shape through the ceramic foam.